

**CLAIM LISTING:**

1-49. (*Canceled*)

50. (*Currently Amended*) A prosthesis for the replacement of at least a portion of the bone of a facet located on a mammalian vertebra, comprising:  
a surface that articulates with another facet surface;  
a fixation portion having a longitudinally-extending portion that is longer than a pedicle of the vertebra, said longitudinally-extending portion configured for implantation into an interior bone space of said vertebra, said surface being connected to said fixation portion.

51. (*Currently Amended*) The device of claim **50** wherein said longitudinally-extending said fixation portion is a post that extends through is adapted to be fitted into the an interior bone space of the [[ a ]] pedicle and into a vertebral body space of said vertebra.

52. (*Previously Presented*) The device of claim **51** wherein said post is porous coated to allow for bone ingrowth.

53. (*Previously Presented*) The device of claim **52** wherein said porous coating includes osteoconductive or osteoinductive substances.

54. (*Previously Presented*) The device of claim **50** wherein said surface that articulates is comprised of one of a group consisting of a polymeric bearing material, a polymeric bearing material attached to a metal substrate, a ceramic bearing material, and a metal bearing material.

55. (*NEW*) The device of claim **51** wherein said post is textured.

56. (*NEW*) The device of claim **55** wherein said post is textured to permit bone ingrowth.

57. (*NEW*) The device of claim **50** wherein said longitudinally-extending portion is a screw that extends through an interior bone space of the pedicle and into a vertebral body space of said vertebra.

58. (NEW) The device of claim 57 wherein said screw is textured to allow for bone ingrowth.

59. (NEW) The device of claim 50, wherein said longitudinally-extending portion has a transverse width less than a width of said pedicle.

60. (NEW) The device of claim 50, wherein said prosthesis replaces a substantial portion of said bone of said facet.

61. (NEW) The device of claim 50, wherein said prosthesis replaces all of said bone of said facet.

62. (NEW) The device of claim 50, wherein a longitudinal axis of said longitudinally-extending portion extends through said surface that articulates.

63. (NEW) The device of claim 50, wherein said longitudinally-extending portion is longer than said pedicle of said vertebra at a cervical level of the spine.

64. (NEW) The device of claim 50, wherein said longitudinally-extending portion is longer than said pedicle of said vertebra at a thoracic level of the spine.

65. (NEW) The device of claim 50, wherein said longitudinally-extending portion is longer than said pedicle of said vertebra at a lumbar level of the spine.

66. (NEW) The device of claim 50, wherein said longitudinally-extending portion is longer than said pedicle of said vertebra at a sacral level of the spine.

67. (NEW) The device of claim 50, wherein said surface is removably connected to the fixation portion.

68. (NEW) A prosthesis for the replacement of at least a portion of a bone of a facet located on a mammalian vertebra, the prosthesis comprising:

a facet surface that articulates with another surface of an opposing vertebra;  
an affixing element having a length greater than a length of a pedicle wherein a portion of the length of the affixing element engages an interior bone space of the mammalian vertebra, the facet surface being connected to the affixing element.

69. (NEW) The prosthesis of claim 68 wherein the facet surface is a natural facet surface that articulates with the surface of the opposing vertebrae.

70. (NEW) The prosthesis of claim 68 wherein the facet surface is an artificial facet surface that articulates with the surface of the opposing vertebrae.

71. (NEW) The prosthesis of claim 68 wherein the surface of the opposing vertebrae is a facet surface of the opposing vertebrae.

72. (NEW) The device of claim 68 wherein the affixing element is a post that is adapted to traverse a pedicle and engage the vertebral body.

73. (NEW) The device of claim 68 wherein the affixing element is textured along at least a portion of its length.

74. (NEW) The device of claim 68 wherein the affixing element is a screw that is adapted to traverse a pedicle and engage at least a portion of the vertebral body.

75. (NEW) The device of claim 72 wherein the post is porous coated to allow for bone ingrowth.

76. (NEW) The device of claim 75 wherein the porous coating includes osteoconductive or osteoinductive substances.

77. (NEW) The device of claim **68** wherein the facet surface that articulates is comprised of one of a group consisting of a polymeric bearing material, a polymeric bearing material attached to a metal substrate, a ceramic bearing material, and a metal bearing material.

78. (NEW) A prosthesis for the replacement of at least a portion of a bone of a first facet located on a first mammalian vertebra and a second facet located on a second mammalian vertebra, the prosthesis comprising:

- a first facet surface that articulates with an opposing facet surface of the second vertebra;

- a second facet surface that articulates with an opposing facet surface of the first vertebra;

- a first affixing element having a length greater than a length of a pedicle wherein a portion of the length of the affixing element engages an interior bone space of the first vertebra, the first facet surface being connected to the first affixing element; and

- a second affixing element having a length greater than a length of the pedicle wherein a portion of the length of the affixing element engages an interior bone space of the second vertebra, the second facet surface being connected to the second affixing element.

79. (NEW) The device of claim **78** wherein the first facet surface that articulates is comprised of one of a group consisting of a polymeric material, a polymeric bearing material attached to a metal substrate, a ceramic bearing material, and a metal bearing material.

80. (NEW) The device of claim **78** wherein the first affixing element is a first post that is adapted to traverse a pedicle and engage the first vertebral body.

81. (NEW) The device of claim **80** wherein the first post is porous coated to allow for bone ingrowth.

82. (NEW) The device of claim **80** wherein the porous coating includes osteoconductive or osteoinductive substances.

83. **(NEW)** The device of claim **78** wherein the second facet surface that articulates is comprised of one of a group consisting of a polymeric material, a polymeric bearing material attached to a metal substrate, a ceramic bearing material, and a metal bearing material.

84. **(NEW)** The device of claim **78** wherein the first facet surface is a first artificial facet surface, the second facet surface is a second artificial facet surface, and the first and second artificial facet surfaces articulate with each other.

85. **(NEW)** The device of claim **78** wherein the second affixing element is a second post that is adapted to traverse a pedicle and engage the second vertebral body.

86. **(NEW)** The device of claim **85** wherein the second post is porous coated to allow for bone ingrowth.

87. **(NEW)** The device of claim **86** wherein the porous coating includes osteoconductive or osteoinductive substances.

88. **(NEW)** The device of claim **51** wherein said post comprises a pedicle screw.

89. **(NEW)** The device of claim **88** wherein said pedicle screw includes osteoconductive or osteoinductive substances.

*[Remainder of page intentionally left blank]*